Appl. No. 10/773,754 Amdt, dated October 30, 2006 Reply to Office Action of June 30, 2006

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

- 1 (currently amended). A method for treating a patient, to decrease the likelihood of developing or the progression of Alzheimer's disease comprising administering to the individual <u>in need thereof</u>, an effective amount of an inhibitor of memapsin 2 having an <u>a</u> K_i of less than or equal to 10⁷⁷ M or which binds to crystallized enzyme characterized by the parameters in Table 2 when bound to OM-99-2 (SEO ID NO. 28).
- $\label{eq:condition} 2 \mbox{ (original)}. \quad \mbox{The method of Claim 1 wherein the inhibitor is administered} \\ \mbox{orally}.$
- 3 (currently amended). The method of Claim 1 wherein the inhibitor blocks cleavage of APP β-amyloid precursor protein (APP).
- 4 (currently amended). The method of Claim 1 wherein the inhibitor of memapsin 2 which binds to the crystallized enzyme characterized by the parameters in Table 2 when bound to OM-99-2 (SEQ ID NO. 28), is modeled using a computer program passed on the erystallization coordinates three dimensional structure coordinates of memapsin 2.
- 5 (currently amended). The method of Claim 1 wherein the inhibitor of memapsin 2 which binds to the crystallized enzyme characterized by the parameters in Table 2 when bound to OM-99-2 (SEO ID NO. 28), is modeled using a computer program based on the parameters for memapsin shown in Table 2.

Appl. No. 10/773,754 Amdt. dated October 30, 2006 Reply to Office Action of June 30, 2006

6 (currently amended). The method of Claim 1 comprising creating a data base of data obtained by modeling more than one inhibitor of memapsin 2 which binds to the crystallized enzyme characterized by the parameters in Table 2 when bound to OM-99-2 (SEQ ID NO. 28), based on the erystallization coordinates three dimensional structure coordinates of memapsin-2 or parameters of Table 2.